UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/611,447	07/06/2000	Guo-Qiang Wang	91436-265	6335

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EXAMINER
MILLS, DONALD L

ART UNIT	PAPER NUMBER
2662	4

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 July 2000</u> .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-23</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-23</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> .	6) ☐ Other: .

DETAILED ACTION

Specification

1.   The disclosure is objected to because of the following informalities:

Page 15, line 3, "**112c**" should be corrected to "**112B**". Appropriate correction is

required.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3.   Claims 1-23 are rejected under 35 U.S.C. 102(a) as being anticipated by Fan et al.

("Extensions to CR-LDP and RSVP-TE for Optical Path Set-up"), hereinafter referred to as Fan.

Regarding claims 1 and 11, Fan discloses *assigning an optical label to a channel group*

the channel group using one of the fiber optic links and comprising a plurality of channels

(Claim 1) (The Optical Label TLVs encodes an optical label to one or more channel groups,

which is switched at the fiber level, with a number of group members. See pages 3 and 13.)

And, *encoding the optical label so as to comprise a type field, a length field and a value field,*

where the value field comprises a label component and where the label component comprises an

indication of bandwidth on each of the plurality of channels (Claim 1)/A type field; a length

field; and a value field; where the value field comprises a label component, and the label

component comprises an indication of bandwidth on each of the plurality of channels (Claim 11)

(The Optical Label TLV comprises a type, length and value field wherein the value field is composed of a channel group type describing the bandwidth of the channel. See page 12.)

Regarding claim 2, Fan discloses where *the indication of bandwidth identifies the one of the fiber optic links and a wavelength on the one of the fiber optic links* (The value field contains a label component comprising a fiber and lambda ID. See pages 13 and 14.)

Regarding claim 3, Fan discloses where *the indication of bandwidth further identifies the channel group* (The value field contains a label component comprising the channel group type. See page 13.)

Regarding claim 4, Fan discloses where *the bandwidth on each of the plurality of channels is represented by a single bit* (The encoding type is specified by the Line Rate Encoding Type value. See page 13.)

Regarding claim 5, Fan discloses *a bit value of zero indicates available bandwidth on a given one of the plurality of channels* (When the Line Rate Encoding Type is set to 0 for transparent bit service. See page 14.)

Regarding claims 6, 12, and 13, Fan discloses *encoding a representation of the traffic characteristics of the interface so as to comprise a type field, a length field and a value field, where the value field comprises an attribute (Claim 6)/A type field; a length field; and a value field; where the value field comprises an attribute and where the attribute comprises an indication of a service type of the service network (Claim 12)/A type field; a length field; and a value field; where the value field comprises an attribute and where the attribute comprises an indication of a control protocol of the service network (Claim 13)* (The Optical Interface Type

TLV, which comprises a type, length and value field. Where the value field comprises sub-

TLVs of either Service Type or Control Protocol Mask. See pages 10-11.)

Regarding claim 7, Fan discloses *the attribute comprising an indication of a service type*

of the service network (The Optical Interface Type TLV's value field comprises a Service Type

ID that identifies the service type of the network. See page 10.)

Regarding claim 8, Fan discloses *the attribute comprising an indication of a control*

protocol of the service network (The Optical Interface Type TLV's value field comprises a

Control Protocol Mask that identifies the protocol type of the network. See page 11.)

Regarding claims 9, 14, and 22, Fan discloses *encoding a representation of the*

characteristics of the optical trail so as to comprise a type field, a length field and a value field,

where the value field comprises a channel group description (Claim 9)/A type field; a length

field; and a value field; where the value field comprises a channel group description ... (Claim

14)/Encode a representation of characteristics of an optical trail of a channel group so as to

comprise a type field, a length field and a value field, where the value field comprises a

description of the channel group) (Claim 22) (The Optical Trail Descriptor TLV encodes the

characteristics of an optical trail of a channel group, the TLV comprises a type field, length field

and value field that contains a Channel Group. See pages 11 and 12.) And, *where the channel*

group description comprises an indication of channel group type and an indication of a number

of members in the channel group (Claim 9)/and where the channel description comprises an

indication of channel group type and an indication of a number of members in the channel group

(Claims 14 and 22) (The Channel Group is composed of a Channel Group Type and the Number

of Group Members. See page 12.)

Regarding claims 10, 15, 19, and 23, Fan discloses a method, which comprises:

Encoding a specification of the session parameters so as to comprise a type field, a length field and a value field, where the value field comprises a range component (Claim 10)/A type; a length field; and a value field (Claim 15)/Encoding a specification of session parameters for an optical communication session over a fiber optic link so as to comprise a type field, a length field and a value field, where the value field comprises a range component (Claim 19)/Encode a specification of session parameters for an optical communication session over a fiber optic link so as to comprise a type field, a length field and a value field, where the value field comprises a range component (Claim 23) (The Optical Session Parameters TLV for optical communication comprises a type field, length field and value field that contains an Optical Label Range Component. See page 9.)

The range component comprises (Claims 10, 19, and 23)/Where the value field comprises a range component and the range component comprises (Claim 15):

An identity of one of the fiber optic links (Claim 10)/link (Claims 15, 19, and 23) (The Optical Label Range Component contains a Fiber ID. See page 9.)

A lower bound of a block of wavelengths supported by the originating label switching router on the one of the fiber optic links (Claims 10)/fiber optic link (Claims 15, 19, and 23) (The Optical Label Range Component contains a Minimum Lambda ID that specifies the lower bound of a block of Lambdas that are supported by the originating OLSR. See page 9.)

An upper bound of the block of wavelengths supported by the originating label switching router on the one of the fiber links (Claim 10)/fiber optic link (Claims 15, 19, and 23)

(The Optical Label Range Component contains a Maximum Lambda ID that specifies the upper

bound of a block of Lambdas that are supported by the originating OLSR. See page 9.)

Regarding claims 16, 17, 20, and 21 Fan discloses an OLSR capable of:

Assigning an optical label to a channel group, the channel group using one of a plurality

of fiber optic links and comprising a plurality of channels (Claims 16 and 20) (The Optical Label

TLVs encodes an optical label to one or more channel groups, which is switched at the fiber

level, with a number of group members. See pages 3 and 13.)

Encode the optical label so as to comprise a type field, a length field and a value field,

where the value field comprises a label component and where the label component comprises an

indication of bandwidth on each of the plurality of channels (Claims 16 and 20)/Encode a

representation of characteristics of traffic over an interface between a node in a service network

and the optical label switching router so as to comprise a type field, a length field and a value

field, where the value field comprises an attribute of the traffic (Claim 17 and 21) (The Optical

Label TLV comprises a type, length and value field wherein the value field is composed of a

channel group type describing the bandwidth of the channel. See page 12.)

Regarding claim 18, Fan discloses an OLSR capable to:

Encode a representation of characteristics of an optical trail of a channel group so as to

comprise a type field, a length field and a value field, where the value field comprises a

description of the channel group (The Optical Trail Descriptor TLV encodes the characteristics

of an optical trail composed of a channel group, the TLV comprises a type field, length field and

value field that contains a Channel Group. See pages 11 and 12.)

Where the description of the channel group comprises an indication of a type of the channel group and an indication of a number of members in the channel group (The Channel Group is composed of a Channel Group Type and the Number of Group Members. See page 12.)

Conclusion

4.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L Mills whose telephone number is 703-305-7869. The examiner can normally be reached on 8:00 AM to 4:30 PM.
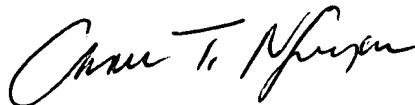
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Donald L Mills

September 25, 2003

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